

## PROTOCOL

### Human Health Remedial Goal Options

#### Introduction

This protocol has been developed in order to support the Savannah River Site environmental remediation program. It provides instructions for the identification of human health remedial goal options (HH RGOs). The protocol instructions are based on the latest available USEPA guidance and agreement from the staff of USEPA, SCDHEC, and USDOE as members of the Risk Assessment Design Team (RADT).

This protocol is to be applied to the human health refined constituents of concern (HH RCOCs) that are available after performing an uncertainty analysis.

#### Details

1. Calculate RGOs at the  $1 \times 10^{-6}$ ,  $1 \times 10^{-5}$ , and  $1 \times 10^{-4}$  risk level for carcinogenic constituents.
2. Calculate RGOs at the 0.1, 1, and 3 hazard quotient (HQ) levels for noncarcinogenic constituents.

Table 1 provides a sample table for the identification of RGOs.

**Table 1. (Sample) Remedial Goal Options**

RCOC	Units	Industrial Worker 1E-06	Industrial Worker 1E-05	Industrial Worker 1E-04	Industrial Worker HQ= 0.1	Industrial Worker HQ = 1	Industrial Worker HQ = 3
Constituent A	mg/kg	1.6	16	160	25.6	256	768
Constituent B	mg/kg	--	--	--	666	6660	19980
Constituent C	pCi/g	0.112	1.12	11.2	--	--	--

Note - Preliminary Remediation Goals (PRGs) are useful tools for identifying the initial cleanup goals at a site, and can be used as a basis to establish RGOs. The SRS risk assessment technical staff controls and maintains the PRG tables for use by Soil and Groundwater Closure Projects.